

(i) Increase the amount of fuel tank vapor storage material according to the following function:

$$\text{Cap}_f = \text{Cap}_i \left( \frac{\text{T. Vol.}}{\text{Max. Vol.}} \right)$$

Where:

Cap<sub>f</sub>=final amount of fuel tank vapor storage material, grams.

Cap<sub>i</sub>=initial amount of fuel tank vapor storage material, grams.

T. Vol.=total fuel tank volume of completed vehicle, gallons.

Max. Vol. = maximum fuel tank volume as specified on the label required in paragraph (g)(1) of this section, gallons.

(ii) Use, if applicable, hosing for fuel vapor routing which is at least as impermeable to hydrocarbon vapors as that used by the primary manufacturer.

(iii) Use vapor storage material with the same absorptive characteristics as that used by the primary manufacturer.

(iv) Connect, if applicable, any new hydrocarbon storage device to the existing hydrocarbon storage device in series such that the original hydrocarbon storage device is situated between the fuel tank and the new hydrocarbon storage device. The original hydrocarbon storage device shall be sealed such that vapors cannot reach the atmosphere. The elevation of the original hydrocarbon storage device shall be equal to or lower than the new hydrocarbon storage device.

(v) Submit a written statement to the Administrator that paragraphs (g)(2)(i) through (g)(2)(iv) of this section have been complied with.

(3) If applicable, the Administrator will send a return letter verifying the receipt of the written statement required in paragraph (g)(2)(v) of this section.

(h) *Notification of nonconformance penalty.* (1) Light-duty trucks and heavy-duty vehicles and engines for which nonconformance penalties are to be paid in accordance with § 86.1113-87(b) shall have the following information printed on the label required in paragraph (a) of this section. The manufacturer shall begin labeling production engines or vehicles within 10 days after the completion of the PCA. This statement shall read: "The manufacturer of

this engine/vehicle will pay a non-conformance penalty to be allowed to introduce it into commerce at an emission level higher than the applicable emission standard. The compliance level (or new emission standard) for this engine/vehicle is XXX." (The manufacturer shall insert the applicable pollutant and compliance level calculated in accordance with § 86.1112-87(a).)

(2) If a manufacturer introduces an engine or vehicle into commerce prior to the compliance level determination of § 86.1112-87(a), it shall provide the engine or vehicle owner with a label as described above to be affixed in a location in proximity to the label required in paragraph (a) of this section within 30 days of the completion of the PCA.

(i) All light-duty vehicles and light-duty trucks shall comply with SAE Recommended Practices J1877 July 1994, "Recommended Practice for Bar-Coded Vehicle Identification Number Label," and J1892 October 1993, "Recommended Practice for Bar-Coded Vehicle Emission Configuration Label." SAE J1877 and J1892 are incorporated by reference. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. Copies may be obtained from the Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15096-0001. Copies may be inspected at Docket No. A-90-35 at EPA's Air Docket (LE-131), Room 1500M, 1st Floor, Waterside Mall, 401 M St., SW., Washington, DC, or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

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#### § 86.096-2 Definitions.

The definitions listed in this section apply beginning with the 1996 model

year. The definitions of § 86.094-2 continue to apply to 1996 and later model year vehicles.

*Certification Short Test* means the test, for gasoline-fueled Otto-cycle light-duty vehicles and light-duty trucks, performed in accordance with the procedures contained in 40 CFR part 86 subpart O.

*Diurnal breathing losses* means diurnal emissions.

*Diurnal emissions* means evaporative emissions resulting from the daily cycling of ambient temperatures.

*Hot soak emissions* means evaporative emissions after termination of engine operation.

*Hot-soak losses* means hot soak emissions.

*Resting losses* means evaporative emissions that may occur continuously, that are not diurnal emissions, hot soak emissions, running losses, or spitback emissions.

*Running losses* means evaporative emissions that occur during vehicle operation.

*Spitback emissions* means evaporative emissions resulting from the loss of liquid fuel that is emitted from a vehicle during a fueling operation.

*Useful life* means:

(1) For light-duty vehicles, and for light light-duty trucks not subject to the Tier 0 standards of § 86.094-9(a), intermediate useful life and/or full useful life. Intermediate useful life is a period of use of 5 years or 50,000 miles, whichever occurs first. Full useful life is a period of use of 10 years or 100,000 miles, whichever occurs first, except as otherwise noted in § 86.094-9. The useful life of evaporative emission control systems on the portion of these vehicles subject to the evaporative emission test requirements of § 86.130-96 is defined as a period of use of 10 years or 100,000 miles, whichever occurs first.

(2) For light light-duty trucks subject to the Tier 0 standards of § 86.094-9(a), and for heavy light-duty truck engine families, intermediate and/or full useful life. Intermediate useful life is a period of use of 5 years or 50,000 miles, whichever occurs first. Full useful life is a period of use of 11 years or 120,000 miles, whichever occurs first. The useful life of evaporative emission control systems on the portion of these vehi-

cles subject to the evaporative emission test requirements of § 86.130-96 is also defined as a period of 11 years or 120,000 miles, whichever occurs first.

(3) For an Otto-cycle heavy-duty engine family, a period of use of 8 years or 110,000 miles, whichever occurs first, except for the portion of evaporative emission control systems subject to the evaporative emission test requirements of § 86.1230-96, for which the applicable period of use is 10 years or 110,000 miles, whichever occurs first.

(4) For a diesel heavy-duty engine family:

(i) For light heavy-duty diesel engines, period of use of 8 years or 110,000 miles, whichever occurs first.

(ii) For medium heavy-duty diesel engines, a period of use of 8 years or 185,000 miles, whichever occurs first.

(iii) For heavy heavy-duty diesel engines, a period of use of 8 years or 290,000 miles, whichever occurs first, except as provided in paragraph (4)(iv) of this definition.

(iv) For heavy heavy-duty diesel engines used in urban buses, for the particulate standard, a period of use of 10 years or 290,000 miles, whichever occurs first.

(5) As an option for both light-duty trucks under certain conditions and heavy-duty engine families, an alternative useful life period assigned by the Administrator under the provisions of § 86.094-21(f).

(6) The useful-life period for purposes of the emissions defect warranty and emissions performance warranty shall be a period of 5 years/50,000 miles, whichever occurs first, for light-duty trucks, Otto-cycle heavy-duty engines and light heavy-duty diesel engines. For all other heavy-duty diesel engines the aforementioned period is 5 years/100,000 miles, whichever occurs first. However, in no case may this period be less than the manufacturer's basic mechanical warranty period for the engine family.

[58 FR 16020, Mar. 24, 1993, as amended at 58 FR 58417, Nov. 1, 1993]

#### § 86.096-3 Abbreviations.

(a) The abbreviations in § 86.094-3 continue to apply. The abbreviation in this section applies beginning with the 1996 model year.